

# REPORT ON MACHINERY.

REC'D NEW YORK *Sept. 9-1918*

Received at London Office **MON. OCT. 14. 1918**

Date of writing Report *24. 8. 1918* When handed in at Local Office

Port of *Cleveland, Ohio.*

No. in Survey held at *Ashtabula, O.* Date, First Survey *7. 3. 18* Last Survey *24. 8. 1918*

Reg. Book. on the *Screw Steamer, LAKE PLEASANT* (Number of Visits *20*)

Master *Bull at Ashtabula, O.* By whom built *The Gt. Lakes Eng. Wks.* When built *1918. 8.*

Engines made at *Ashtabula, O.* By whom made *The Gt. Lakes Eng. Wks.* when made *1918*

Boilers made at *Buffalo N.Y.* By whom made *The Lake Erie Boiler Wks.* when made *1918*

Registered Horse Power Owners *U.S. Army, Board Emergency Fleet* Port belonging to *Ashtabula.*

Nom. Horse Power as per Section 28 *289.* Is Refrigerating Machinery fitted for cargo purposes *No.* Is Electric Light fitted *Yes.*

ENGINES, &c.—Description of Engines *Triple Expansion* No. of Cylinders *3.* No. of Cranks *3.*

Dia. of Cylinders *21. 35. 59* Length of Stroke *42* Revs. per minute *85* Dia. of Screw shaft *as per rule 13.16* Material of *S.*

Is the screw shaft fitted with a continuous liner the whole length of the stern tube *Yes* Is the after end of the liner made water tight

in the propeller boss *Yes* If the liner is in more than one length are the joints burned *Yes* If the liner does not fit tightly at the part

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *No* If two

liners are fitted, is the shaft lapped or protected between the liners *No* Length of stern bush *49 1/2*

Dia. of Tunnel shaft *as per rule 11.06* Dia. of Crank shaft journals *as per rule 11.61* Dia. of Crank pin *11 7/8* Size of Crank webs *23 x 8 3/4* Dia. of thrust shaft under

collars *11 7/8* Dia. of screw *14-6* Pitch of Screw *13-9* No. of Blades *4* State whether moveable *No* Total surface *70 sq.*

No. of Feed pumps *2* Diameter *10 x 6* Stroke *12* Can one be overhauled while the other is at work *Yes*

No. of Bilge pumps *2* Diameter of ditto *3 1/2* Stroke *21* Can one be overhauled while the other is at work *Yes*

No. of Donkey Engines *2 Duplex* Sizes of Pumps *10 x 12 x 12, 10 x 6 x 12* No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room *4-3* In Holds, &c. *Forward Holds, 2-3* In *Aft Holds, 3-3*

No. of Bilge Injections *1* sizes *7* Connected to condenser, or to circulating pump *C.P.* Is a separate Donkey Suction fitted in Engine room & size *Yes, 3"*

Are all the bilge suction pipes fitted with roses *Yes* Are the roses in Engine room always accessible *Yes* Are the sluices on Engine room bulkheads always accessible *No*

Are all connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *Both*

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates *Yes* Are the Discharge Pipes above or below the deep water line *Above*

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel *Yes* Are the Blow Off Cocks fitted with a spigot and brass covering plate *Yes*

What pipes are carried through the bunkers *Steam & Windlass* How are they protected *Steel Casings*

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *Yes*

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges *Yes*

Is the Screw Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *Yes* worked from *Top Platform ER.*

BOILERS, &c.—(Letter for record *S.*) Manufacturers of Steel *Kennecott Steel Co.*

Total Heating Surface of Boilers *4962* Is Forced Draft fitted *No* No. and Description of Boilers *Two Cyl. Single End.*

Working Pressure *190 lb.* Tested by hydraulic pressure to *300 lb.* Date of test *13. 6. 18* No. of Certificate *128*

Can each boiler be worked separately *Yes* Area of fire grate in each boiler *74.7 sq.* No. and Description of Safety Valves to

each boiler *Two Spring* Area of each valve *12.57 sq.* Pressure to which they are adjusted *164 lb.* Are they fitted with easing gear *Yes*

Smallest distance between boilers or uptakes and bunkers or woodwork *8 1/2* Mean dia. of boilers *15-9* Length *11-0* Material of shell plates *S.*

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

Material of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Area at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Steam dome: description of joint to shell % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

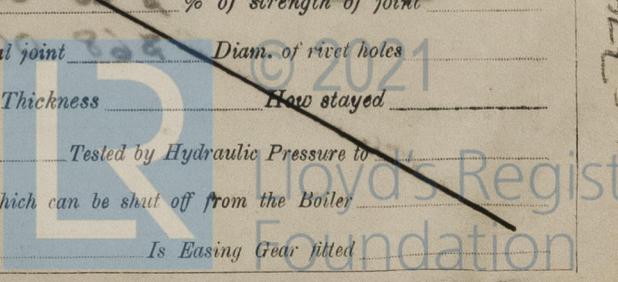
SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

If not, state whether, and when, one will be sent

4020-047500-1675 00



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied: - Two top end bolts and nuts, two bottom end bolts, two main bearing bolts, set of empty bolts, valves for air, fuel and bilge pumps, one propeller.

The foregoing is a correct description,

H. C. Paklow - for Great Lake City Manufacturer.

1918
Dates of Survey while building
During progress of work in shops - Mar 7, Apr 16, 26, May 29, June 5, 12, 22, 27, July 6, 12, 13, 19, 21, 24, 31.
During erection on board vessel - Aug 9, 17, 21, 22, 24
Total No. of visits 20

Is the approved plan of main boiler forwarded herewith?

" " " donkey " " "

Dates of Examination of principal parts - Cylinders 9.8.18 Slides 21.7.18 Covers 21.7.18 Pistons 31.7.18 Rods 31.7.18
Connecting rods 19.7.18 Crank shaft 21.7.18 Thrust shaft 31.7.18 Tunnel shafts 6.7.18 Screw shaft 22.6.18 Propeller 12.6.18
Stern tube 29.5.18 Steam pipes tested 17.8.18 Engine and boiler seatings 18.7.18 Engines holding down bolts 17.8.18
Completion of pumping arrangements 22.8.18 Boilers fixed 9.8.18 Engines tried under steam 22.8.18
Completion of fitting sea connections 27.6.18 Stern tube 27.6.18 Screw shaft and propeller 19.7.18
Main boiler safety valves adjusted 22.8.18 Thickness of adjusting washers Lock nuts fitted
Material of Crank shaft S Identification Mark on Do. 191 CC485 Material of Thrust shaft S Identification Mark on Do. 191 CC485
Material of Tunnel shafts S Identification Marks on Do. 191 CC485 Material of Screw shafts S Identification Marks on Do. 191 CC485
Material of Steam Pipes Steel. Test pressure 570 lb.

Is an installation fitted for burning oil fuel? Is the flash point of the oil to be used over 150°F?

Have the requirements of Section 49 of the Rules been complied with?

Is this machinery duplicate of a previous case? Yes. If so, state name of vessel 'Lata St Regis'

General Remarks (State quality of workmanship, opinions as to class, &c.)

The above Engines have been constructed under Special Permit. The materials and workmanship employed in their manufacture are of a high quality and sound and efficient. Together with the Boilers they have been fitted & tested in a satisfactory manner and found satisfactory under test.

The Vessel is eligible, in my opinion, to have record + LMC 8.18.

It is stated that the construction chamber girders of Main Boilers do not fulfill the requirements of the U.S. Govt. Inspection for a pressure exceeding 164 lb. T which pressure the safety valves have been adjusted.

It is submitted that this vessel is eligible for THE RECORD. + LMC 8.18

The amount of Entry Fee ... \$ 10 : 00 :
Special Forgings ... \$ 172 : 25 :
Donkey Boiler Fee ... \$ 45 : 00 :
Travelling Expenses (if any) \$ 68 : 00 :

W. Lane
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York SEP 24 1918

Assigned + LMC 8.18 Elec. dt

MACHINERY CERTIFICATE WRITTEN 14-10-18

